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10/594,113	11/21/2006	Chihiro Hirose	8091-1003	7041

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YOUNG & THOMPSON
209 Madison Street
Suite 500
ALEXANDRIA, VA 22314

EXAMINER	
LICHTI, MATTHEW L	

ART UNIT	PAPER NUMBER
3663	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/594,113	HIROSE, CHIHIRO	
	Examiner	Art Unit	
	Matthew Lichti	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02/13/2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *09/25/2006, 02/13/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 18-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

3. Regarding claim 18, the claimed process (a) does not result in a physical transformation or (b) must be limited to a practical application, which produces a useful, tangible, and concrete result. The claimed process comprises nothing more than collecting and estimating data and does not include a practical application of the data. There is no step that includes applying that information to produce any kind of real world result. For process to be statutory, a computer and the descriptive material claimed must act to define a structural and functional interrelationship between the "modeling" steps and the claimed elements of a computer such that a tangible result is realized and therefore useful. The claim does not appear to use any of the data manipulated by the claimed method; therefore, the claim is not statutory process.

4. Claims 19-24 are also rejected based on their dependency of the defected parent claim.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 17 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 17 and 24 recite judging "that the planned route point **is to be passed** when the distance is **larger** than a threshold". The specification does not mention thresholds but discusses predetermined values and judging that the route point is **not to be passed** when the distance is **larger** than the predetermined values (fig. 4, step s409 and step s414). One of ordinary skill would therefor not know how to determine the threshold values from the specification.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 12, 14, 19, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Regarding claims 12, 14, 19, and 21, it is not clear what it means to "calculate the distance for predetermined times". For example, the phrase could be interpreted to mean that the distance is measured **at predetermined times** such as immediately after a deviation is detected or once every 5 seconds, or if it the measurement is carried out a **predetermined number of times**, or if it is measured over a **predetermined time**

interval, or if it is calculating the driving distance of the fastest route for **predetermined times of the day** such as rush hour.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 11-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Endo et al. (U.S. Patent 5,902,349).

12. Regarding claim 11, Endo et al. disclose a navigation apparatus comprising:

a deviation judging unit (fig. 4, map matching controller 21) configured to judge whether a moving object has deviated from a guided route (NVP1, col. 12, lines 34-35) to a destination (fig. 4, map matching controller 21 sends off-route signal 22, col. 13, lines 51-54, fig. 9, step 2);

a distance calculating unit (fig. 4, guide route controller 23, col. 13, line 65 – col. 14, line 5) configured to calculate a distance (fig. 10, linear distance D1) from a deviated point (triangle Pc of fig. 10) to a planned route point (figs. 5, 10, 11, & 22, Xs or dots for nodes) when the deviation judging unit judges that the moving object has deviated from the guided route before passing through the planned route point;

a route judging unit (fig. 4, guide route controller 23) configured to judge whether to pass the planned route point based on the distance (fig. 9, step 5, fig. 10 determines which route points X to pass based on distance D1, col. 14, lines 1-15); and

a re-searching unit (fig. 4, guide route controller 23) configured to re-search a route based on a result of judgment by the route judging unit (fig. 9, step 6, col. 14, lines 16-20).

13. Regarding claim 12, Endo et al. disclose that the distance calculating unit (fig. 4, guide route controller 23) is configured to calculate the distance for predetermined times as the moving object moves off the guided route (calculates distance to planned route points at times when off-route condition detected, automatic search mode detected, col. 13, lines 58-67), and

the route judging unit (fig. 4, guide route controller 23) is configured to judge that the planned route point is not to be passed when the distance calculated for the predetermined times is an increasing trend (determines which route points to pass and not pass when a distance is an increasing trend compared to distance to other planned route points, col. 13, line 65 – col. 14, line 15; col. 14, lines 57-67, fig. 10).

14. Regarding claim 13, Endo et al. disclose that the guided route (NVP1) includes a first planned route point to be guided first and a second planned route point to be guided following the first planned route point (figs. 5, 10, 11, & 22, Xs or dots for route points N1, N2, N3..., col. 12, lines 4-16),

the distance calculating unit (fig. 4, guide route controller 23) is configured to calculate a first distance and a second distance, the first distance being a distance from the deviated point to the first planned route point (figs. 5 & 10, linear distance D1 to a node), the second distance being a linear distance from the deviated point to the second planned route point (figs. 5 & 10, linear distance D1 to a different node), when the deviation judging unit judges that the moving object has deviated from the guided route before passing the first planned route point (col. 13, line 65 – col. 14, line 15), and

the route judging unit (fig. 4, guide route controller 23) is configured to judge whether to pass the first planned route point based on the first distance and the second distance (col. 13, line 65 – col. 14, line 15, fig. 9, step 5).

15. Regarding claim 14, Endo et al. disclose that the distance calculating unit is configured to calculate the first distance and the second distance for predetermined times as the moving object moves off the guided route (calculates distance to planned route points at times when off-route condition detected, automatic search mode detected, col. 13, lines 58-67), and

the route judging unit is configured to judge that the first planned route point is not to be passed when the first distance calculated for the predetermined times is an increasing tend and the second distance calculated for the predetermined times is a decreasing tend (determines which route points to pass and not pass when a distance is an increasing trend compared to distance to other planned route points, col. 13, line 65 – col. 14, line 15; col. 14, lines 57-67, fig. 10), and

the re-searching unit is configured to re-search a route passing the second planned route point without passing the first planned route point (fig. 10, route to a second pre-planned route point skips other first pre-planned route points, fig. 9, step 6, col. 14, lines 16-20).

16. Regarding claim 15, Endo et al. disclose a presenting unit (fig. 4, display 2, audio 7) configured to present, when the route judging unit judges that the planned route point is not to be passed, that the planned route point is not to be passed (figs. 10 & 11, presents route to the return point bypassing the nodes that it determines are not to be passed, col. 14, lines 16-24).

17. Regarding claim 16, Endo et al. disclose a presenting unit (fig. 4, display 2, audio 7) configured to present a content to confirm whether to pass the planned route point when the route judging unit judges that the planned route point is not to be passed (figs. 10 & 11, presents route to the return point bypassing the nodes that it determines are not to be passed, col. 14, lines 16-24; col. 15, lines 44-52); and

an acquiring unit (fig. 4, controller 23 senses via GPS 4 and other sensors 5, 6, 20, 21, that user drove to the return point indicated by presentation display 2 or audio 7, or user input via remote control 7, col. 15, lines 52-63, figure 5, steps 4, 5, 7, 10) configured to acquire information indicative of an instruction in response to the confirmation, wherein

the re-searching unit (fig. 4, controller, 23) configured to re-search a route based on the instruction (fig. 12, steps 7, 8, 10, col. 15, line 49 – col. 16, line 13).

18. Regarding claim 17, Endo et al. disclose the route judging unit is configured to judge that the planned route point is to be passed when the distance (D) is larger than a threshold (distance D to the other nodes are threshold distances for determining if a node is to be passed, col. 14, lines 1-15 & 57-62).

19. Regarding claim 18, Endo et al. disclose a route searching method comprising:

judging whether a moving object has deviated from a guided route to a destination (route NVP1, col. 12, lines 34-35, fig. 4, map matching controller 21 sends off-route signal 22, col. 13, lines 51-54, fig. 9, step 2);

calculating a distance (fig. 10, linear distance D1) from a deviated point (triangle Pc of fig. 10) to a planned route point (figs. 5, 10, 11, & 22, Xs or dots for nodes) when it is judged that the moving object has deviated from the guided route before passing through the planned route point at the judging (col. 13, line 65 – col. 14, line 5);

judging whether to pass the planned route point based on the distance (fig. 9, step 5, fig. 10 determines which route points X to pass based on distance D1, col. 14, lines 1-15); and

re-searching a route based on a result of judgment at the judging whether to pass the planned route point (fig. 9, step 6, col. 14, lines 16-20).

20. Regarding claim 19, Endo et al. disclose that calculating includes calculating the distance for predetermined times as the moving object moves off the guided route (calculates distance to planned route points at times when off-route condition detected, automatic search mode detected, col. 13, lines 58-67), and

the judging whether to pass the planned route point includes judging that the planned route point is not to be passed when the distance calculated for the predetermined times is an increasing trend (col. 13, line 65 – col. 14, line 15, fig. 9, step 5).

21. Regarding claim 20, Endo et al. disclose that the guided route includes a first planned route point to be guided first and a second planned route point to be guided following the first planned route point (figs. 5, 10, 11, & 22, Xs or dots for route points N1, N2, N3…, col. 12, lines 4-16),

the calculating includes calculating a first distance and a second distance, the first distance being a distance from the deviated point to the first planned route point (figs. 5 & 10, linear distance D1 to a node), the second distance being a linear distance from the deviated point to the second planned route point (figs. 5 & 10, linear distance D1 to a different node), when the moving object is judged to be deviated from the guided route before passing the first planned route point at the judging whether a moving object has deviated (col. 13, line 65 – col. 14, line 15), and

the judging whether to pass the planned route point includes judging whether to pass the first planned route point based on the first distance and the second distance (col. 13, line 65 – col. 14, line 15, fig. 9, step 5).

22. Regarding claim 21, Endo et al. disclose that calculating includes calculating the first distance and the second distance for predetermined times as the moving object moves off the guided route (calculates distance to planned route points at times when off-route condition detected, automatic search mode detected, col. 13, lines 58-67), and

the judging whether to pass the planned route point includes judging that the first planned route point is not to be passed when the first distance calculated for the predetermined times is an increasing tend and the second distance calculated for the predetermined times is a decreasing tend (determines which route points to pass and not pass when a distance is an increasing trend compared to distance to other planned route points, col. 13, line 65 – col. 14, line 15; col. 14, lines 57-67, fig. 10), and

the re-searching includes re-searching a route passing the second planned route point without passing the first planned route point (fig. 10, route to a second pre-planned route point skips other first pre-planned route points, fig. 9, step 6, col. 14, lines 16-20).

23. Regarding claim 22, Endo et al. disclose presenting, when it is judged that the planned route point is not to be passed at the judging whether to pass the planned route point, that the planned route point is not to be passed (figs. 10 & 11, presents route to

the return point bypassing the nodes that it determines are not to be passed, col. 14, lines 16-24).

24. Regarding claim 23, Endo et al. disclose presenting a content to confirm whether to pass the planned route point when it is judged that the planned route point is not to be passed at the judging whether to pass the planned route point (figs. 10 & 11, presents route to user via display and audio to the return point bypassing the nodes that it determines are not to be passed, col. 14, lines 16-24; col. 15, lines 44-52); and

acquiring information indicative of an instruction in response to the confirmation (fig. 4, controller 23 senses via GPS 4 and other sensors 5, 6, 20, 21, that user drove to the return point indicated by presentation display 2 or audio 7, or user input via remote control 7, col. 15, lines 52-63, figure 5, steps 4, 5, 7, 10),

wherein the re-searching includes re-searching a route based on the instruction (fig. 12, steps 7, 8, 10, col. 15, line 49 – col. 16, line 13).

25. Regarding claim 24, Endo et al. disclose that the judging whether to pass the planned route point includes judging that the planned route point is to be passed when the distance is larger than a threshold (distance D to the other nodes are threshold distances for determining if a node is to be passed, col. 14, lines 1-15 & 57-62).

26. Regarding claim 25, Endo et al. disclose a computer-readable recording medium (fig. 7, program memory 8) that stores therein a route searching program (fig. 7, NVP1, NVP2) making a computer (fig. 7, guide route control processor 7) execute:

judging whether a moving object has deviated from a guided route to a destination (route NVP1, col. 12, lines 34-35, fig. 4, map matching controller 21 sends off-route signal 22, col. 13, lines 51-54, fig. 9, step 2);

calculating a distance (fig. 10, linear distance D1) from a deviated point (triangle Pc of fig. 10) to a planned route point (figs. 5, 10, 11, & 22, Xs or dots for nodes) when it is judged that the moving object has deviated from the guided route before passing through the planned route point at the judging (col. 13, line 65 – col. 14, line 5);

judging whether to pass the planned route point based on the distance (fig. 9, step 5, fig. 10 determines which route points X to pass based on distance D1, col. 14, lines 1-15); and

re-searching a route based on a result of judgment at the judging whether to pass the planned route point (fig. 9, step 6, col. 14, lines 16-20).

Conclusion

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Katayama, Yokoyama, and Miyahara, and Nambata teach navigation systems and apparatuses that detect deviations and routes back to points along the calculated route.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Lichti whose telephone number is (571) 270-5374. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on (571)272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. L./
Examiner, Art Unit 3663

/Rick Palabrica/
Primary Examiner, Art Unit 3663